



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6

1445 Ross Avenue, Suite 1200

Dallas, TX 75202-2733

June 1, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Lake Charles Liquefaction Project Docket Nos. CP14-119-000, CP14-120-000, and
CP14-122-000

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Federal Energy Regulatory Commission (FERC) Draft Environmental Impact Statement (DEIS) for the Lake Charles Liquefaction Project. The purpose of this DEIS is to inform the FERC decision-makers, the public, and the permitting agencies about the potential adverse and beneficial impacts of the proposed project and its alternatives, and recommend mitigation measures that would reduce adverse impacts to the extent practicable.

EPA's review identified concerns regarding impacts to air quality. In addition, we request the FEIS include additional information in consideration of potential indirect effects and greenhouse gas emissions from the proposed project. For these reasons we have rated the DEIS as "Environmental Concerns – Insufficient Information" (EC-2). The EPA's Rating System Criteria can be found at <http://www.epa.gov/compliance/nepa/comments/ratings.html>. EPA recommends that these issues be addressed in the Final EIS. We have enclosed detailed comments which clarify our concerns.

EPA appreciates the opportunity to review the DEIS. Please send our office one copy of the FEIS when it is electronically filed. This letter will be published on the EPA website, www.epa.gov, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. If you have any questions or concerns, I can be reached at 214-665-7505, or contact Michael Jansky of my staff at jansky.michael@epa.gov or 214-665-7451.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith Hayden", is written over a horizontal line.

Keith Hayden
Chief, Office of Planning
Coordination

Enclosures

**DETAILED COMMENTS
ON THE
FEDERAL ENERGY REGULATORY COMMISSION
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE LAKE CHARLES LIQUEFACTION PROJECT**

BACKGROUND:

The Lake Charles Liquefaction Project consists of two main components: 1) the development of natural gas liquefaction and LNG export capabilities through construction of a new liquefaction facility and modifications to the existing Trunkline LNG Terminal in Calcasieu Parish, Louisiana; and 2) the construction of facilities necessary to provide natural gas supplies to the proposed liquefaction facility, including two new pipelines (Mainline Connector and Mainline 200-3 Loop), a new compressor station (Compressor Station 203-A), five new meter stations, and modifications to existing pipeline facilities, compressor stations, and meter stations. The project would be able to produce 5.48 million metric tons per annum of LNG for export. Capacity for the proposed project is contracted by BG LNG.

Subject to the receipt of FERC authorization and all other applicable permits, authorizations, and approvals, Lake Charles LNG anticipates starting construction of the liquefaction facility and modifications to the existing LNG terminal in 2015, and placing the first new liquefaction train into service in 2019. The three proposed liquefaction trains would be placed into service 6 months apart. Trunkline would begin construction of the proposed Non-Liquefaction Facilities in 2017 and initiate service in late 2018, prior to startup of the first liquefaction train.

The U.S. Army Corps of Engineers, U.S. Coast Guard, U.S. Department of Energy, U.S. Fish and Wildlife Service, and U.S. Department of Transportation participated as cooperating agencies in the preparation of the DEIS. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by a proposal and participate in the National Environmental Policy Act analysis. Although the cooperating agencies provided input on the conclusions and recommendations presented in the DEIS, the agencies will present their own conclusions and recommendations in their respective records of decision for the project.

The DEIS addresses the potential environmental effects of the construction, modification, and operation of the following project facilities:

- three liquefaction trains, each with a production capacity sufficient to produce 5.48 million metric tons per annum of LNG for export (each train would contain metering and gas treatment facilities, liquefaction and refrigerant units, safety and control systems, and associated infrastructure);
- modifications and upgrades at the existing LNG terminal;

Previous FERC NEPA analyses of LNG facilities have included a helpful discussion of the greenhouse gas (GHG) emissions associated with construction of the project, and annual emissions from the operation of the liquefaction facility; we recommend including that information in this FEIS. In addition to operational and construction emissions, there are also GHG emissions associated with the production, transport, and combustion of the natural gas proposed to be exported by the project. Because of the global nature of climate change, even where the ultimate end use of the natural gas occurs outside the US, additional greenhouse gas emissions attributable to the project would affect the U.S. Consistent with NEPA and CEQ regulations ^[3], because any such emissions contribute to climate change impacts in the US, it is appropriate to consider and disclose them in the EIS due to their reasonably close causal relationship to the project. FERC's DEIS for the Jordan Cove Energy and Pacific Connector Gas Pipeline project included useful calculations of GHG emissions from end use of the gas exported by the facility, and we recommend that the FEIS include the same calculations.

DOE has also issued two documents that are helpful in assessing the GHG emissions implications of the project. They are the Addendum mentioned above, and the NETL's recent report, entitled "*Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States*". ^[4] These reports provide a helpful overview of GHG emissions from all stages of a project, from production through transmission and combustion. The NETL report also includes comparative analysis of GHG emissions associated with other domestic fuel sources and LNG exports as they relate to other possible fuel sources in receiving regions. This information is helpful to decision-makers in reviewing the foreseeable GHG emissions associated with the increased production of natural gas and the export of LNG and how they compare to other possible fuels. EPA recommends both DOE reports be considered as part of the decision-making process for this project and incorporated by reference in the FEIS. FERC may also want to consider adapting this analysis to more specifically consider the GHG implications of this project.

In addition, we recommend that the FEIS describe measures to reduce GHG emissions associated with the project, including reasonable alternatives or other practicable mitigation opportunities and disclose the estimated GHG reductions associated with such measures. For example, using energy efficient equipment and incorporating methane leakage best practices. The FEIS alternatives analysis should, as appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change. EPA further recommends that the Record of Decision commit to implementation of reasonable mitigation measures that would reduce or eliminate project-related GHG emissions

Methane Leakage Prevention

We recommend that FERC consider potential best management practices (BMPs) to reduce leakage of methane associated with operation of the facility; for examples of practicable mitigation measures to reduce these project-related GHG emissions, EPA has compiled useful information on technologies and practices that can help reduce methane emissions from natural gas systems, including information regarding emission reduction options for LNG storage, import and export facilities. ^[5]

ATTACHMENT 1

Fugitive Dust Source Controls

- Fugitive Dust Source Controls: The DEIS should identify the need for a Fugitive Dust Control Plan to reduce Particulate Matter 10 and Fine Particulate Matter 2.5 emissions during construction and operations. We recommend that the plan include these general commitments:
 - Stabilize heavily used unpaved construction roads with a non-toxic soil stabilizer or soil weighting agent that will not result in loss of vegetation, or increase other environmental impacts.
 - During grading, use water, as necessary, on disturbed areas in construction sites to control visible plumes.
 - Vehicle Speed
 - Limit speeds to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
 - Limit speeds to 10 miles per hour or less on unpaved areas within construction sites on un-stabilized (and unpaved) roads.
 - Post visible speed limit signs at construction site entrances.
 - Inspect and wash construction equipment vehicle tires, as necessary, so they are free of dirt before entering paved roadways, if applicable.
 - Provide gravel ramps of at least 20 feet in length at tire washing/cleaning stations, and ensure construction vehicles exit construction sites through treated entrance roadways, unless an alternative route has been approved by appropriate lead agencies, if applicable.
 - Use sandbags or equivalent effective measures to prevent run-off to roadways in construction areas adjacent to paved roadways. Ensure consistency with the project's Storm Water Pollution Prevention Plan, if such a plan is required for the project.
 - Sweep the first 500 feet of paved roads exiting construction sites, other unpaved roads en-route from the construction site, or construction staging areas whenever dirt or runoff from construction activity is visible on paved roads, or at least twice daily (less during periods of precipitation).
 - Stabilize disturbed soils (after active construction activities are completed) with a non-toxic soil stabilizer, soil weighting agent, or other approved soil stabilizing method.
 - Cover or treat soil storage piles with appropriate dust suppressant compounds and disturbed areas that remain inactive for longer than 10 days. Provide vehicles (used to transport solid bulk material on public roadways and that have potential to cause visible emissions) with covers. Alternatively, sufficiently wet and load materials onto the trucks in a manner to provide at least one foot of freeboard.
 - Use wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) where soils are